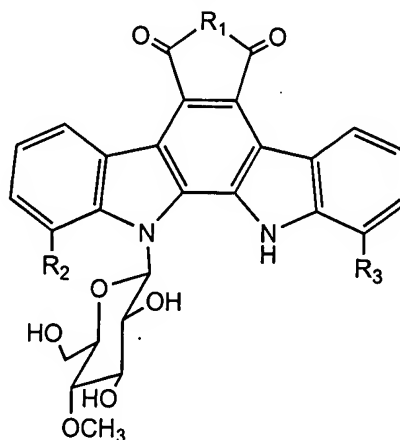


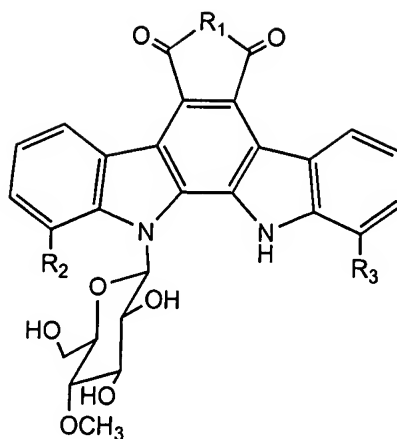
What is claimed is:

1. A method for enhancing the radiosensitivity of a neoplastic cell comprising contacting the neoplastic cell with a radiosensitivity increasing amount of indolocarbazole derivative having the following structure A



wherein  $R_1$  is not  $NCH_3$  and wherein  $R_2$  and  $R_3$  are not H when  $R_1$  is NH.

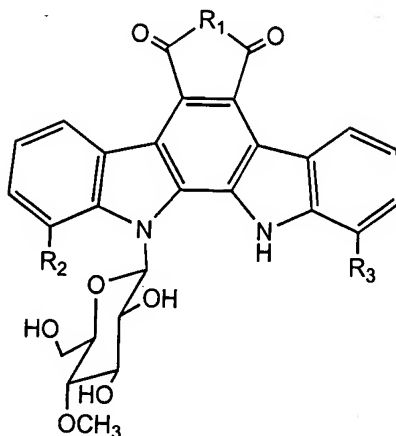
2. The method of claim 1, wherein  $R_1$  is NH, O, or NOH.
3. The method of claim 1, wherein  $R_2$  and  $R_3$  are Cl or H.
4. The method of claim 1, wherein the amount of indolocarbazole derivative is at a non-cytotoxic level.
5. A method for enhancing the radiosensitivity of a neoplastic cell comprising contacting the neoplastic cell with a radiosensitivity increasing amount of a composition comprising an indolocarbazole derivative having the following structure A



wherein R<sub>1</sub> is not NCH<sub>3</sub> and wherein R<sub>2</sub> and R<sub>3</sub> are not H when R<sub>1</sub> is NH.

- 5     6.     The method of claim 5, wherein  $R_1$  is NH, O, or NOH.
7.     The method of claim 5, wherein  $R_2$  and  $R_3$  are Cl or H.
8.     The method of claim 5, wherein the composition further comprises a  
10     pharmaceutically acceptable carrier.
9.     The method of claim 5, wherein the amount of composition is at a non-  
cytotoxic level.
- 15    10.     The method of claim 1, wherein the neoplastic cell is solid tumor cell or  
cancer cell.
11.     The method of claim 1, wherein the neoplastic cell is selected from the group  
consisting of prostate cancer cell, bone cancer cell, colon cancer cell,  
20     lymphoma cancer cell, and brain cancer cell.
12.     A method for treating a neoplastic cell comprising  
contacting the neoplastic cell with a radiosensitivity increasing

amount of indolocarbazole derivative having the following structure A



5 wherein  $R_1$  is not  $NCH_3$  and wherein  $R_2$  and  $R_3$  are not H when  $R_1$  is NH; and

contacting the neoplastic cell with radiation or radiation in  
combination with an anti-neoplastic chemotherapeutic agent.

10 13. The method of claim 12, wherein  $R_1$  is NH, O, or NOH.

14. The method of claim 12, wherein  $R_2$  and  $R_3$  are Cl or H.

15 15. The method of claim 12, wherein the neoplastic cell is contacted with the  
indolocarbazole derivative before being contacted with radiation or radiation  
in combination with an anti-neoplastic chemotherapeutic agent.

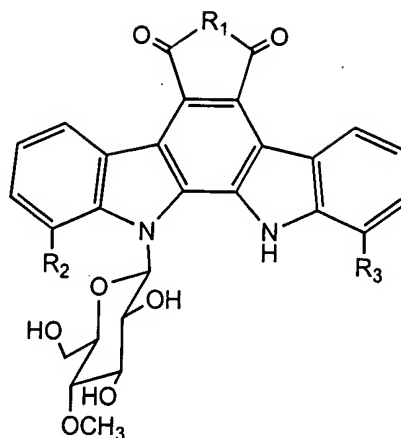
16. The method of claim 12, wherein the amount of indolocarbazole derivative is  
at a non-cytotoxic level.

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17. A method for treating a neoplastic cell comprising

contacting the neoplastic cell with a radiosensitivity increasing  
amount of a composition comprising an indolocarbazole derivative having the

following structure A



wherein  $R_1$  is not  $NCH_3$  and wherein  $R_2$  and  $R_3$  are not H when  $R_1$  is NH; and

contacting the neoplastic cell with radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

18. The method of claim 17, wherein  $R_1$  is NH, O, or NOH.

19. The method of claim 17, wherein  $R_2$  and  $R_3$  are Cl or H.

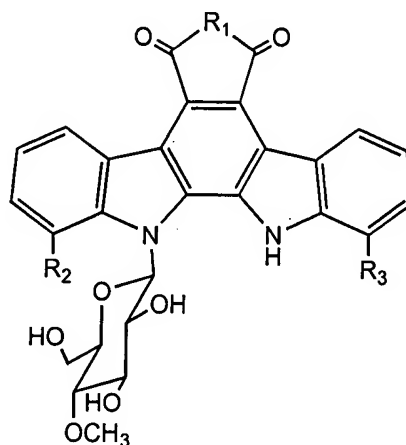
20. The method of claim 17, wherein the composition further comprises a pharmaceutically acceptable carrier.

21. The method of claim 17, wherein the amount of composition is at a non-cytotoxic level.

22. The method of claim 17, wherein the neoplastic cell is contacted with the composition before being contacted with radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

23. A method for treating a neoplastic growth comprising

administering to a subject in need of such treatment a radiosensitivity increasing amount of an indolocarbazole derivative having the following structure A



wherein  $R_1$  is not  $NCH_3$  and wherein  $R_2$  and  $R_3$  are not H when  $R_1$  is NH, and radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

24. The method of claim 23, wherein  $R_1$  is NH, O, or NOH.

25. The method of claim 23, wherein  $R_2$  and  $R_3$  are Cl or H.

26. The method of claim 23, wherein the amount of indolocarbazole derivative is at a non-cytotoxic level.

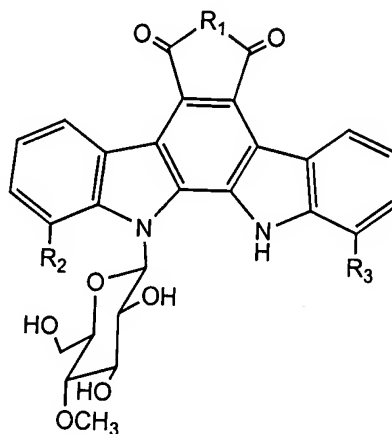
27. The method of claim 23, wherein the indolocarbazole derivative is administered before the radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

28. A method for treating a neoplastic growth comprising

administering to a subject in need of such treatment a radiosensitivity

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increasing amount of a composition comprising an indolocarbazole derivative having the following structure A



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wherein R<sub>1</sub> is not NCH<sub>3</sub> and wherein R<sub>2</sub> and R<sub>3</sub> are not H when R<sub>1</sub> is NH, and radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.

- 10 29. The method of claim 28, wherein R<sub>1</sub> is NH, O, or NOH.
30. The method of claim 28, wherein R<sub>2</sub> and R<sub>3</sub> are Cl or H.
- 15 31. The method of claim 28, wherein the amount of composition is at a non-cytotoxic level.
32. The method of claim 28, wherein the composition further comprises a pharmaceutically acceptable carrier.
- 20 33. The method of claim 28, wherein the composition is administered before the radiation or radiation in combination with an anti-neoplastic chemotherapeutic agent.